ATLAS
ENGINEERING SERVICES, INCORPORATED

November 7, 2005

Santa Rosa Associates II
c/o INDUSTRIAL REALTY CO. of CA.
1091 Industrial Road Suite 101
San Carlos, California 94070-4118

SUBJECT: Groundwater Monitoring - Third Quarter 2005
3842 Finley Avenue
Santa Rosa, California

Dear Sirs:

Atlas Engineering Services, Incorporated (Atlas) respectfully submits the following report on groundwater monitoring conducted during the third quarter of 2005 at 3842 Finley Avenue in Santa Rosa, California. The scope of work completed includes sampling of one (1) monitor well and one (1) set of water level measurements at the three (3) monitor wells, as required by the North Coast Regional Water Quality Control Board (NCRWQCB) "Monitoring and Reporting Program No. R1-2002-0052 (issued May 10, 2002)". Attached to this report are copies of the field notes, chain-of-custody form, and lab reports.

Introduction

The above-referenced site is reported to have formerly contained underground storage tanks (USTs) used for aviation gasoline. Three (3) monitor wells (MW-1, MW-2, and MW-3) are present on the site (Figure 2). Prior to August 1997, monitoring was conducted by other consultants. This report documents sampling of monitor well MW-2 and water level measurements at MW-1, MW-2, and MW-3 conducted at the site in the third quarter of 2005 by Atlas. Monitor well MW-2 was sampled on September 1, 2005. Water level measurements at MW-1, MW-2, and MW-3 were also taken on September 1, 2005.

Purging

On September 1, 2005, depth to water (DTW) was measured in monitor wells MW-1, MW-2, and MW-3 prior to the purging of MW-2. Monitor wells MW-1 and MW-3 were not purged or sampled.

MW-1: DTW was measured at eight and fifty-four hundredths (8.54) feet below the top of casing (TOC).

MW-2: Prior to purging, DTW was measured at seven and ninety hundredths (7.90) feet below the TOC. MW-2 was checked for the presence of free product using a new, clean polyethylene disposable bailer with special attachment; no free product was present. A two-inch (2") diameter submersible pump was used to purge the well. Purge water was discharged into five (5) gallon buckets for volume measurement. A total of twenty-six (26) gallons were purged from the well, equal to three (3) casing volumes.

P.O. BOX 1260, SANTA CRUZ, CA, 95061, (831) 426-1440
Fax: (831) 426-1288

MW-3: DTW was measured at eight and forty-seven hundredths (8.47) feet below the TOC.

Sampling

Atlas waited to collect a groundwater sample until the water level had recovered to eighty percent (80%) of its original level. Then a new, clean polyethylene bailer was used to remove a volume of water from the well for collection of a sample. Three (3) volatile organic analysis (VOA) vials, each containing preservative, were filled with groundwater from the bailer. Because of the presence of a separate phase liquid in MW-2 during the first quarter 2005 sampling event, two (2) one-liter amber glass bottles were also filled with groundwater from the bailer. All of the VOA vials and amber bottles were labeled with the date, location, and sampler, prior to storage on blue-ice in a cooler. Water generated by purging and sampling was placed in a storage tank pending sample analysis.

Laboratory Analyses

The sample containers were transported under chain of custody (see attached) to Entech Analytical Labs, Inc., a state certified laboratory, for analyses. The sample was analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-gas) and benzene, toluene, ethylbenzene, and xylenes (BTEX) by EPA Method 8260B; and diesel fuel #2, kerosene, motor oil, and stoddard by EPA method 8015B modified.

Copies of the lab reports are attached. Sample results are presented in Table 1 with previous results.

MW-2: The EPA Method 8260B analyses for the MW-2 groundwater sample reported 4.100 milligrams per liter (mg/L) TPH-gas, 1,000 micrograms per liter (ug/L) benzene, 78 ug/L ethylbenzene, and 14 ug/L xylenes. Toluene was not detected above method detection limits. The EPA Method 8015 modified analyses for the MW-2 groundwater sample reported 290 ug/L kerosene, although the lab noted an atypical kerosene pattern. Diesel, motor oil, and Mineral Spirits (Stoddard) were not detected above method detection limits.

Quality Control

Quality control is included in the attached lab reports.

Horizontal Hydraulic Gradient

Immediately upon arrival at the site, and prior to purging and sampling, DTW measurements were taken at all three (3) wells by Atlas on September 1, 2005 using an electronic well sounder (see attached field notes). To calculate the horizontal hydraulic gradient, Atlas used TOCs referenced to Mean Sea Level (MSL) (Table 3) and casing

coordinates (Table 2) surveyed by Atlas on August 18, 2004 using global positioning survey (GPS) equipment. The water surface elevations (WSEs) were calculated as the difference between TOC and DTW (Table 3).

Using such data, the horizontal hydraulic gradient was calculated for September 1, 2005 to be seventy ten-thousandths (0.0070) foot per foot in a direction approximately one hundred and thirty-five (135) degrees clockwise from north, or approximately towards the southeast (Table 4; Figure 2).

Summary and Conclusions

This report has been prepared to document quarterly groundwater monitoring conducted at 3842 Finley Avenue, in Santa Rosa, California (Figure 1) during the third quarter of 2005. The sampling and analyses were conducted in accordance with the requirements of the NCRWQCB "Monitoring and Reporting Program No. R1-2002-0052". In accordance therewith, monitor well MW-2 was sampled on September 1, 2005.

Analyses of the MW-2 groundwater sample reported 4.100 milligrams per liter (mg/L) TPH-gas, 1,000 micrograms per liter (ug/L) benzene, 78 ug/L ethylbenzene, and 14 ug/L xylenes. Toluene was not detected above method detection limits. An atypical pattern was reported present in the kerosene range, quantified as 290 ug/L. Diesel, motor oil, and mineral spirits (Stoddard) were not detected above method detection limits.

Water level measurements were collected at all three (3) wells (Table 3). The horizontal hydraulic gradient was calculated for September 1, 2005 to be seventy ten-thousandths (0.0070) foot per foot in a direction approximately one hundred and thirty-five (135) degrees clockwise from north, or approximately towards the southeast.

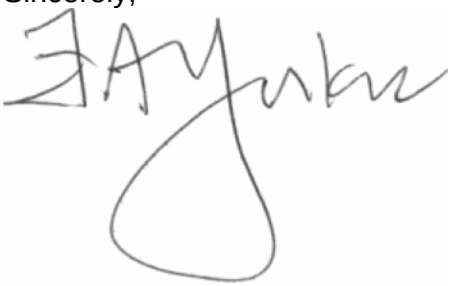
Recommendations

In accordance with "Monitoring and Reporting Program No. R1-2002-0052" issued by the NCRWQCB for the site, Atlas recommends sampling of monitor well MW-2 during the next quarter, and collection of water level measurements from all three (3) wells for use in determining the horizontal hydraulic gradient.

If separate phase compounds are present in MW-2 groundwater during the fourth quarter 2005 sampling event, Atlas also recommends sampling and analysis of MW-2 groundwater for SVOCs by EPA Method 8270C to verify the presence of the phthalates detected during the first quarter 2005.

Please call me at (831) 426-1440 if you have any questions or require additional information.

Sincerely,



Frederick A. Yukic, MS, PE
Principal Engineer

cc: Mr. Stephen Bargsten, NCRWQCB
Ms. Maria Parks, USACE

Table 1.
Water Analytical Results
Santa Rosa Air Center
3842 Finley Avenue
Santa Rosa, California

Location	Date	TPH-gas	TPH-avgas	TEPH	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	Semi Volatile Organics
		mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
Overex.	4/20/1992	0.13	--	--	1.7	ND	0.8	ND	--	--
MW-1	3/4/1994	0.09	--	--	ND	0.5	ND	0.7	--	--
	6/30/1994	0.26	--	--	ND	ND	ND	ND	--	--
	10/5/1994	ND	--	--	ND	ND	ND	ND	--	--
	12/15/1994	ND	--	--	ND	ND	ND	ND	--	--
	6/21/1995	0.15	--	--	ND	11.0	3.3	1.5	--	--
	9/25/1995	0.24	--	--	1.4	ND	ND	ND	--	--
	3/8/1996	0.12	--	--	0.89	ND	ND	ND	--	--
	12/24/1996	0.059	--	--	ND	ND	ND	ND	--	--
	4/14/1997	0.055	--	--	ND	ND	ND	ND	--	--
	7/16/1997	0.053	--	--	ND	ND	ND	ND	--	--
	8/19/1997	0.12	--	--	ND	ND	ND	ND	ND	--
	11/14/1997	0.055	--	--	ND	ND	ND	ND	ND	--
	2/17/1998	ND	--	--	ND	ND	ND	ND	ND	--
	5/14/1998	0.12	--	--	ND	ND	ND	ND	ND	--
	11/19/1998	ND	--	--	ND	ND	ND	ND	ND	--
	5/18/1999	ND	0.072	--	ND	ND	ND	ND	ND**	--
	11/23/1999	ND	ND	--	ND	ND	ND	ND	ND**	--
	5/16/2000	ND	ND	--	ND	ND	ND	ND	ND**	--
	11/21/2000	ND	ND	--	ND	ND	ND	ND	ND	--
	6/4/2001	0.064	--	--	ND	ND	ND	ND	ND	--
	12/8/2001	0.114	--	--	ND	2.2	ND	2.9	--	--
	5/17/2002	ND	--	--	ND	ND	ND	ND	--	--
	2/20/2003	ND	--	--	ND	ND	ND	ND	--	--
	2/28/2004	ND	--	--	ND	ND	ND	ND	ND	--
	2/17/2005	ND	--	--	ND	ND	0.6	2.5	--	ND

Notes: * = by EPA Method 8240

** = by EPA Method 8260

*** = chromatogram pattern is not typical of fuel

Table 1.
Water Analytical Results
Santa Rosa Air Center
3842 Finley Avenue
Santa Rosa, California

Location	Date	TPH-gas	TPH-avgas	TEPH	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	VOCs	Diesel Fuel #2	Kerosene	Motor Oils	Semi Volatile Organics	Stoddard
		mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L
MW-2	3/4/1994	1.3	--	--	46.	26.	14.	29.	--	--	--	--	--	--	--
	6/30/1994	2.2	--	--	ND	ND	ND	ND	--	--	--	--	--	--	--
	10/5/1994	0.32	--	--	150.	1.7	4.4	5.	--	--	--	--	--	--	--
	12/15/1994	0.58	--	--	57.	ND	ND	ND	--	--	--	--	--	--	--
	6/21/1995	3.6	--	--	1200.	5.9	140.	37.	--	--	--	--	--	--	--
	9/25/1995	4.1	--	--	1300.	7.1	150.	28.	--	--	--	--	--	--	--
	3/8/1996	8.6	--	--	2600.	10.	270.	46.	--	--	--	--	--	--	--
	12/24/1996	8.5	--	--	3100.	9.4	350.	33.	--	--	--	--	--	--	--
	4/14/1997	9.1	--	--	3200.	11.	310.	40.	--	--	--	--	--	--	--
	7/16/1997	4.8	--	--	1800.	16.	130.	11.	--	--	--	--	--	--	--
	8/19/1997	2.1	--	--	290.	ND	ND	ND	ND	--	--	--	--	--	--
	11/14/1997	3.7	--	--	220.	ND	6.	2.6	ND	--	--	--	--	--	--
	2/17/1998	1.5	--	ND	97.	ND	1.	0.79	ND	--	--	--	--	--	--
	5/14/1998	1.5	--	--	140.	ND	3.3	0.71	41.	--	--	--	--	--	--
	8/18/1998	2.5	--	--	610.	ND	ND	ND	ND	--	--	--	--	--	--
		--	--	--	530*	ND*	ND*	ND*	ND*	ND*	--	--	--	--	--
	11/19/1998	3.2	--	--	480.	0.76	8.	4.3	15.	--	--	--	--	--	--
		--	--	--	--	--	--	--	ND**	--	--	--	--	--	--
	2/11/1999	ND	0.16	--	72.	1.1	0.81	ND	ND**	--	--	--	--	--	--
	5/18/1999	ND	2.0	--	370.	ND	4.5	2.9	ND**	--	--	--	--	--	--
	8/17/1999	2.3	ND	--	490.	24.	15.	8.3	ND**	--	--	--	--	--	--
	11/23/1999	3.6	ND	--	310.	19.	10.	ND	ND**	--	--	--	--	--	--
	1/13/2000	2.5	ND	--	120.	3.3	2.2	1.5	ND**	--	--	--	--	--	--
	5/16/2000	2.7	ND	--	380.	11.	22.	19.	ND**	--	--	--	--	--	--
	8/24/2000	1.0	ND	--	400.	ND	6.6	ND	ND**	--	--	--	--	--	--
	11/21/2000	2.3	1.8	--	200.	4.4	4.1	3.4	34.	--	--	--	--	--	--
	2/26/2001	ND	ND	--	ND	ND	ND	ND	ND	--	--	--	--	--	--
	5/22/2001	4.7	--	--	200.	32.	1.	5.	ND**	--	--	--	--	--	--
	9/1/2001	2.0	--	--	390.	11.	8.	2.	--	--	--	--	--	--	--
	12/8/2001	9.67	--	--	1190.	46.5	1050.	506.	--	--	--	--	--	--	--
	2/28/2002	7.63	--	--	2250.	48.6	448.	231.	--	--	--	--	--	--	--
	5/17/2002	9.08	--	--	2180.	37.8	470.	161.	--	--	--	--	--	--	--
	8/23/2002	5.45	--	--	1000.	35.8	195.	77.8	--	--	--	--	--	--	--
	11/21/2002	4.85	--	--	920.	35.1	297.	131.	--	--	--	--	--	--	--
	2/20/2003	4.35	--	--	1190.	11.	201.	83.2	--	--	--	--	--	--	--
	5/23/2003	8.16	--	--	1220.	28.2	436.	110.	--	--	--	--	--	--	--
	8/15/2003	5.21	--	--	938.	20.	200.	50.	--	--	--	--	--	--	--
	11/20/2003	7.33	--	--	1360.	24.1	345.	117.	--	--	--	--	--	--	--
	2/28/2004	3.61	--	--	524.	7.5	125.	42.1	ND	--	--	--	--	--	--
	5/20/2004	4.28	--	--	934.	9.7	73.7	39.7	ND	--	--	--	--	--	--
	8/18/2004	1.64	--	--	852.	12.9	117.	33.3	--	--	--	--	--	--	--
	10/29/2004	8.22	--	--	2100.	14.7	424.	123.	--	--	60****	129****	11*****	--	--
	2/17/2005	4.29	--	--	547.	18.8	124.	31.2	--	--	--	--	--	0.146	--
	5/17/2005	1.82	--	--	637.	3.1	97.5	22.5	--	--	0.11****	0.12****	ND	--	0.14***
	9/1/2005	**4.1**	--	--	**1000.**	**ND**	**78.**	**14.**	**--**	**--**	**ND**	**290*** **	**ND**	--	**ND**

Notes: * = by EPA Method 8240

** = by EPA Method 8260

*** = chromatogram pattern is not typical of fuel

**** = chromatogram pattern is not typical of diesel or kerosene, due to gasoline overlap

***** = chromatogram pattern is not typical of motor oils, due to single peaks

Table 1.
Water Analytical Results
Santa Rosa Air Center
3842 Finley Avenue
Santa Rosa, California

Location	Date	TPH-gas	TPH-avgas	TEPH	Benzene	Toluene	Ethyl benzene	Xylenes	MTBE	VOCs
		mg/L	mg/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-3	3/4/1994	ND	--	--	ND	ND	ND	ND	--	--
	6/30/1994	0.84	--	--	ND	ND	ND	ND	--	--
	10/5/1994	ND	--	--	ND	ND	ND	ND	--	--
	12/15/1994	ND	--	--	ND	ND	ND	ND	--	--
	6/21/1995	ND	--	--	0.8	ND	ND	ND	--	--
	9/25/1995	ND	--	--	ND	ND	ND	ND	--	--
	3/8/1996	ND	--	--	ND	ND	ND	ND	--	--
	12/24/1996	0.052	--	--	1.1	ND	ND	0.69	--	--
	4/14/1997	ND	--	--	ND	ND	ND	ND	--	--
	7/16/1997	0.056	--	--	ND	ND	ND	ND	--	--
	8/19/1997	0.9	--	--	ND	ND	ND	ND	ND	--
	11/14/1997	0.19	--	--	ND	ND	ND	ND	ND	--
	2/17/1998	ND	--	--	0.7	ND	ND	ND	ND	--
	5/14/1998	ND	--	--	ND	ND	ND	ND	ND	--
	11/19/1998	0.058	--	--	ND	ND	ND	ND	ND	--
	5/18/1999	ND	0.082	--	ND	ND	ND	ND	ND**	--
	11/23/1999	0.066***	ND	--	ND	ND	ND	ND	ND**	--
	5/16/2000	ND	ND	--	ND	ND	ND	ND	ND**	--
	11/21/2000	0.077***	ND	--	ND	ND	ND	ND	ND	--
	6/4/2001	0.1	--	--	ND	ND	ND	ND	ND**	--
	12/8/2001	0.091	--	--	ND	ND	ND	ND	--	--
	5/17/2002	0.06	--	--	ND	ND	ND	ND	--	--
	2/20/2003	ND	--	--	0.6	ND	ND	ND	--	--
	2/28/2004	0.059	--	--	ND	ND	ND	ND	ND	--
	2/17/2005	0.081	--	--	4.5	ND	ND	ND	--	--

Notes: * = by EPA Method 8240
** = by EPA Method 8260
*** = chromatogram pattern is not typical of fuel

Table 2
Monitor Well Coordinates
3842 Finley Avenue
Santa Rosa, California

Well	Easting	Northing
MW-1	5,913,720.80	2,346,339.39
MW-2	5,913,598.50	2,346,408.63
MW-3	5,913,567.51	2,346,287.18

Notes: California Coordinates measured on August 18, 2004
by Atlas using GPS equipment.

Table 3
Water Level Measurements
3842 Finley Avenue
Santa Rosa, California

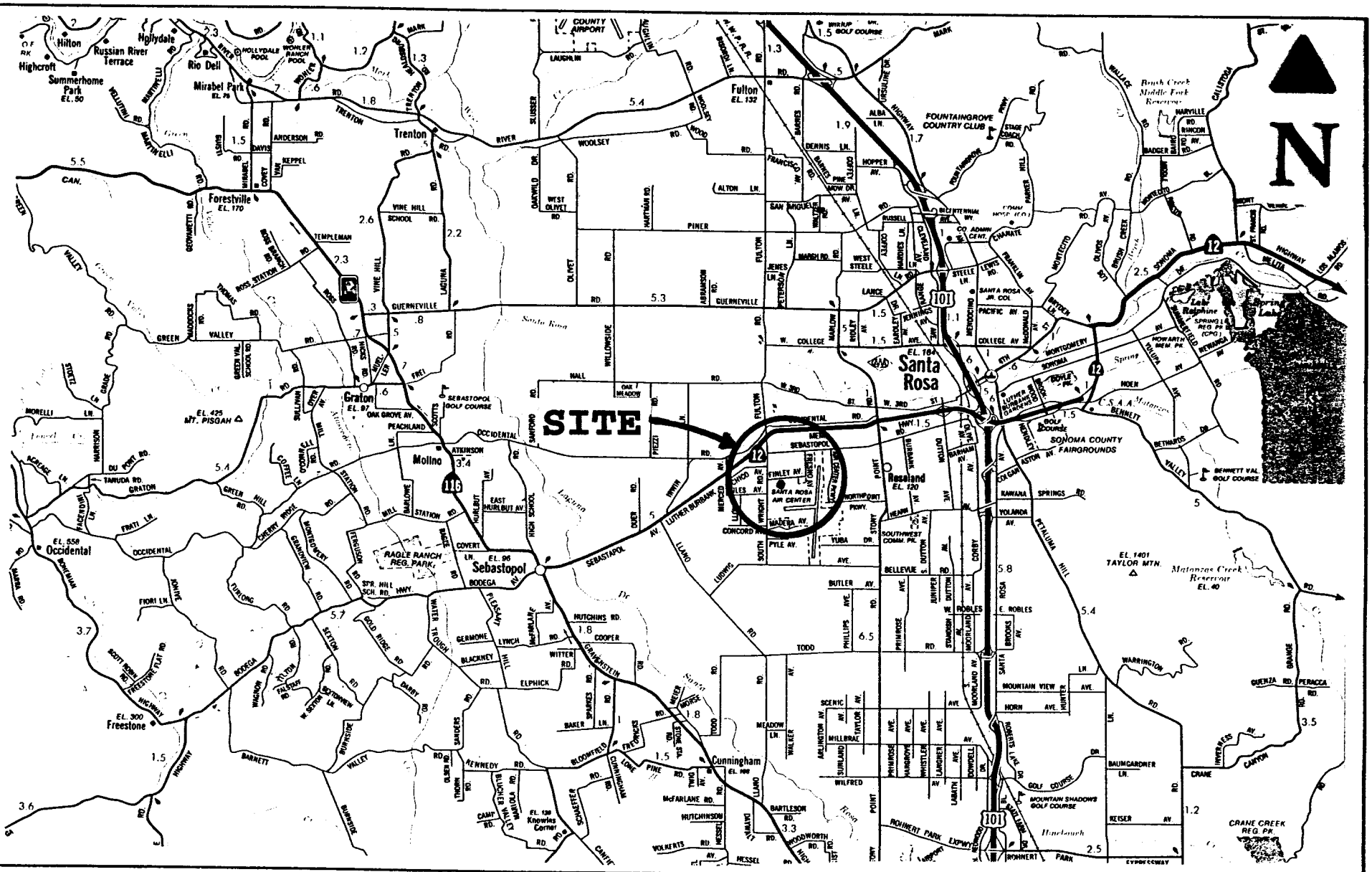
Well	Top of Casing (TOC)	Depth to Water Elevation (DTW)	Water Surface Elevation (WSE)
September 1, 2005			
MW-1	97.60	8.54	89.06
MW-2	96.73	7.90	88.83
MW-3	97.15	8.47	88.68

Notes: Elevations referenced to Mean Sea Level (MSL)
All measurements are in feet.

Table 4.
Horizontal Hydraulic Gradients
3842 Finley Avenue
Santa Rosa, California

Date	Magnitude	Angle from North
4/24/1994	0.001	215
5/27/1994	0.002	232
6/30/1994	0.001	238
7/21/1994	0.0017	237
8/26/1994	0.0016	258
10/5/1994	0.0016	246
10/21/1994	0.002	248
12/15/1994	0.001	149
6/21/1995	0.003	198
9/25/1995	0.002	235
3/8/1996	0.001	164
12/24/1996	0.001	152
4/14/1997	0.002	196
7/16/1997	0.002	255
8/19/1997	0.0016	306
9/16/1997	0.0023	269
10/17/1997	0.0013	321
11/14/1997	0.0015	283
12/18/1997	0.0010	124
1/16/1998	0.0013	144
2/17/1998	0.00044	274
3/12/1998	0.0010	241
4/16/1998	0.0016	239
5/14/1998	0.0022	216
6/16/1998	0.0028	233
8/18/1998	0.0016	244
11/19/1998	0.0014	257
2/11/1999	0.0015	168
5/18/1999	0.0018	236
9/27/1999	0.0030	268
11/23/1999	0.0015	292
1/13/2000	0.0017	260
5/16/2000	0.0022	230
8/24/2000	0.0020	271
11/21/2000	0.0019	287
2/26/2001	0.0007	181
5/22/2001	0.0018	253
9/1/2001	0.0044	295
12/8/2001	0.0076	125
3/26/2002	0.0017	196
5/17/2002	0.0023	224
8/23/2002	0.0087	106
11/21/2002	0.0016	319
2/20/2003	0.0016	170
5/23/2003	0.0016	233
8/15/2003	0.0028	260
11/20/2003	0.0021	265
2/28/2004	0.0017	183
5/20/2004	0.0020	235
8/18/2004	0.0029	260
10/29/2004	0.0019	282
2/17/2005	0.0013	167
5/17/2005	0.0018	213
9/1/2005	**0.0070**	**135**

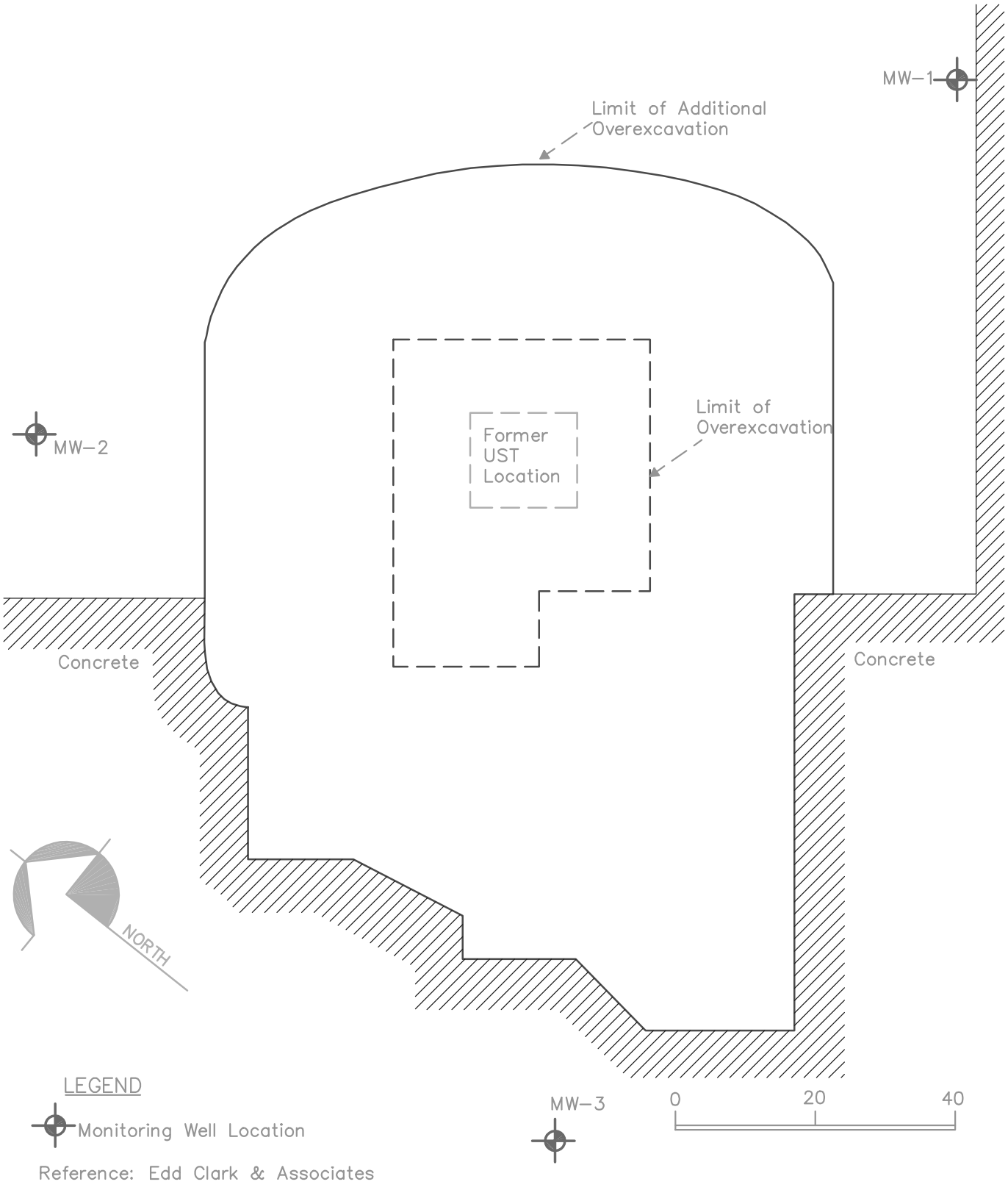
Note: Beginning 8/18/04, gradients calculated using coordinates determined by Atlas using GPS equipment



ATLAS
ENGINEERING SERVICES, INC.

Not to scale

Figure 1. Location Map
3842 Finley Avenue
Santa Rosa, California



ATLAS ENGINEERING SERVICES, INCORPORATED	Scale: 1"=20'	Figure 2. Site Plan 3842 Finley Avenue Santa Rosa, California
	Revised: 9/19/05	

FIELD SHEET

JOB/SITE NAME: SRAC

DATE: 9/1/05

WORK DONE BY: JE

ACTIVITY: Quarterly Monitoring

EQUIPMENT RENTAL/ DRILLER:

HOURS:

NOTES:

TIME	**DESCRIPTION**
1100	Arrived [illegible] opening all well

Well ID	DTW	[illegible]
[illegible]	8.54	8.54
[illegible]	8.47	8.47
[illegible]	7.90	[illegible]

TIME	**DESCRIPTION**
1150 -	Preparing to purge MW-2 - Checked for F.P. w/ Bail [illegible] ment. No F.P. visible. Lowering 12volt [illegible] Sampled from pump
1255 -	Purging Bathroom Sink Faucet for 5 minutes, then
1300	sampling for SVOCs + lead
1310 -	Pumping purge water into tank
1320	Leaving site : Going to Lab to drop off samples
1630 -	Back at office

DATA SHEET FOR SAMPLING WELL MW-2

JOB NAME SRAC
SAMPLED BY JE

DATE 9/1/05
SHEET 1 OF 1

USE POSITIVE VALUES
WELL DEPTH (WD) 21
INITIAL DEPTH TO WATER (DTWI) 7.90
(WD - DTWI) (X GAL/FT) = CASING VOLUME (CV)
(21 - 7.90) (.66 GAL/FT) = 8.646 GAL/CV
(3 CV) (GAL/CV) = 3 CASING VOLUMES
(3) (8.646) = 26 GALLONS NEED TO BE PURGED

DIA.	X
2"	0.17
(4")	0.66
6"	1.5

TIME 1203	DTW 0	GALS	MICR S	PH	TEMP C	TURB	NOTES
1208		5	946	6.96	26.0	24.23	Mostly clear, sulfurous odor
1213		10	951	7.06	22.3	22.45	
1217		15	954	7.08	20.7	32.36	
1222		20	827	7.09	20.6	31.75	
1227		26	820	7.10	20.5	25.69	
1242	9.23						80% Recovery
1245							Sampling 2L Amb. 3VOAs

FINAL DEPTH TO WATER (DTWF) 14.55
0.2 (DTWF) + 0.8 (DTWI) = DTW FOR 80% RECOVERY (DTW 80%R)
0.2 (14.55) + 0.8 (7.90) = 9.23 FT MAX. BEFORE SAMPLING

Entech Analytical Labs, Inc.

3334 Victor Court • Santa Clara, CA 95054 • (408) 588-0200 • Fax (408) 588-0201

Fred Yukic
Atlas Engineering Services
P.O. Box 1260
Santa Cruz, CA 95061

Certificate ID: 45130 - 9/16/2005 1:12:43 PM

Order Number: 45130
Project Name: SRAC

Date Received: 09/01/2005

Certificate of Analysis - Final Report

On September 01, 2005, sample was received under chain of custody for analysis.
Entech analyzes samples "as received" unless otherwise noted. The following results are included:

Matrix	Test	Comments
Liquid	EDF TPH-Extractable EPA 8260B EPA 624 TPH as Gasoline - GC-MS	

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346).
If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,

for

Laurie Glantz-Murphy
Laboratory Director

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Atlas Engineering Services
P.O. Box 1260
Santa Cruz, CA 95061
Attn: Fred Yukic

Date Received: 9/1/2005
Project ID: SRAC
Project Name: SRAC

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab # : 45130-001 **Sample ID: MW-2** **Matrix:** Liquid **Sample Date:** 9/1/2005 12:45 PM

EPA 3510C EPA 8015 MOD. (Extractable) **TPH-Extractable**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Diesel	ND		1	50	µg/L	9/6/2005	DW050906	9/8/2005	DW050906
TPH as Motor Oil	ND		1	200	µg/L	9/6/2005	DW050906	9/8/2005	DW050906
TPH as Kerosene	290		1	50	µg/L	9/6/2005	DW050906	9/8/2005	DW050906
Atypical Kerosene pattern (C8-C16).									
TPH as Mineral Spirits (Stoddard)	ND		1	50	µg/L	9/6/2005	DW050906	9/8/2005	DW050906

Surrogate	Surrogate Recovery	Control Limits (%)
o-Terphenyl	85.6	22 - 133

Analyzed by: JHsiang
Reviewed by: ECunniffe

EPA 5030C EPA 8260B EPA 624 **8260Petroleum**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
Benzene	1000		20	12	µg/L	N/A	N/A	9/13/2005	WM1050913
Toluene	ND		20	12	µg/L	N/A	N/A	9/13/2005	WM1050913
Ethyl Benzene	78		20	12	µg/L	N/A	N/A	9/13/2005	WM1050913
Xylenes, Total	14		20	12	µg/L	N/A	N/A	9/13/2005	WM1050913

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	89.7	70 - 130
Dibromofluoromethane	113	70 - 130
Toluene-d8	107	70 - 130

Analyzed by: XBian
Reviewed by: MaiChiTu

EPA 5030C GC-MS **TPH as Gasoline - GC-MS**

Parameter	Result	Qual	D/P-F	Detection Limit	Units	Prep Date	Prep Batch	Analysis Date	QC Batch
TPH as Gasoline	4100		20	620	µg/L	N/A	N/A	9/13/2005	WM1050913

Surrogate	Surrogate Recovery	Control Limits (%)
4-Bromofluorobenzene	95.2	70 - 130
Dibromofluoromethane	103	70 - 130
Toluene-d8	104	70 - 130

Analyzed by: XBian
Reviewed by: MaiChiTu

Detection Limit = Detection Limit for Reporting.
D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.
ND = Not Detected at or above the Detection Limit.
Qual = Data Qualifier

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8015 MOD. (Extractable) - TPH-Extractable

QC/Prep Batch ID: DW050906

Validated by: ECunniffe - 09/12/05

QC/Prep Date: 9/6/2005

Parameter	Result	DF	PQLR	Units
TPH as Diesel	ND	1	50	µg/L
TPH as Kerosene	ND	1	50	µg/L
TPH as Mineral Spirits (Stoddard)	ND	1	50	µg/L
TPH as Motor Oil	ND	1	200	µg/L

Surrogate for Blank	% Recovery	Control Limits
o-Terphenyl	67.8	22 - 133

Laboratory Control Sample / Duplicate - Liquid - EPA 8015 MOD. (Extractable) - TPH-Extractable

QC/Prep Batch ID: DW050906

Reviewed by: ECunniffe - 09/12/05

QC/Prep Date: 9/6/2005

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Diesel	<50	1000	1020	µg/L	102	40 - 138
TPH as Motor Oil	<200	1000	892	µg/L	89.2	40 - 138

Surrogate	% Recovery	Control Limits
o-Terphenyl	95.6	22 - 133

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Diesel	<50	1000	930	µg/L	93.0	9.0	25.0	40 - 138
TPH as Motor Oil	<200	1000	833	µg/L	83.3	6.9	25.0	40 - 138

Surrogate	% Recovery	Control Limits
o-Terphenyl	87.2	22 - 133

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1050913

Validated by: MaiChiTu - 09/14/05

QC Batch Analysis Date: 9/13/2005

Parameter	Result	DF	PQLR	Units
Benzene	ND	1	0.50	µg/L
Ethyl Benzene	ND	1	0.50	µg/L
Toluene	ND	1	0.50	µg/L
Xylenes, Total	ND	1	0.50	µg/L

Surrogate for Blank	% Recovery	Control Limits
4-Bromofluorobenzene	**95.1**	70 - 130
Dibromofluoromethane	**117**	70 - 130
Toluene-d8	**106**	70 - 130

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1050913

Reviewed by: MaiChiTu - 09/14/05

QC Batch ID Analysis Date: 9/13/2005

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
Benzene	<0.50	20	20.6	µg/L	103	70 - 130
Methyl-t-butyl Ether	<1.0	20	20.8	µg/L	104	70 - 130
Toluene	<0.50	20	20.5	µg/L	102	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**93.6**	70 - 130
Dibromofluoromethane	**106**	70 - 130
Toluene-d8	**95.6**	70 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	<0.50	20	20.2	µg/L	101	**2.0**	25.0	70 - 130
Methyl-t-butyl Ether	<1.0	20	20.0	µg/L	100	**3.9**	25.0	70 - 130
Toluene	<0.50	20	20.1	µg/L	100	**2.0**	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**92.1**	70 - 130
Dibromofluoromethane	**103**	70 - 130
Toluene-d8	**96**	70 - 130

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM1050913

Reviewed by: MaiChiTu - 09/15/05

QC Batch ID Analysis Date: 9/13/2005

MS

Sample Spiked: 45221-001

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	Recovery Limits
Benzene	ND	20	20.4	µg/L	9/13/2005	102	70 - 130
Methyl-t-butyl Ether	ND	20	21.0	µg/L	9/13/2005	105	70 - 130
Toluene	ND	20	20.0	µg/L	9/13/2005	100	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**90.9**	70 - 130
Dibromofluoromethane	**109**	70 - 130
Toluene-d8	**96.9**	70 - 130

MSD

Sample Spiked: 45221-001

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Benzene	ND	20	20.2	µg/L	9/13/2005	101	0.99	25.0	70 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

MSD Sample Spiked: 45221-001

Parameter	Sample Result	Spike Amount	Spike Result	Units	Analysis Date	% Recovery	RPD	RPD Limits	Recovery Limits
Methyl-t-butyl Ether	ND	20	21.0	µg/L	9/13/2005	105	0.0	25.0	70 - 130
Toluene	ND	20	20.0	µg/L	9/13/2005	100	0.0	25.0	70 - 130

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**90.4**	70 - 130
Dibromofluoromethane	**107**	70 - 130
Toluene-d8	**97.3**	70 - 130

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM1050913

Reviewed by: MaiChiTu - 09/14/05

QC Batch ID Analysis Date: 9/13/2005

LCS

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	Recovery Limits
TPH as Gasoline	<25	120	156	µg/L	125	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**104**	70 - 130
Dibromofluoromethane	**97.1**	70 - 130
Toluene-d8	**104**	70 - 130

LCSD

Parameter	Method Blank	Spike Amt	SpikeResult	Units	% Recovery	RPD	RPD Limits	Recovery Limits
TPH as Gasoline	<25	120	150	µg/L	120	**3.9**	25.0	65 - 135

Surrogate	% Recovery	Control Limits
4-Bromofluorobenzene	**104**	70 - 130
Dibromofluoromethane	**102**	70 - 130
Toluene-d8	**102**	70 - 130

Entech Analytical Labs, Inc.

3334 Victor Court (408) 588-0200
Santa Clara, CA 95054 (408) 588-0201 - Fax

Chain of Custody / Analysis Request

Lab# 45130

Attention to:	Phone No.:	Purchase Order No.:	Invoice to: (If Different)	Phone:
Fred Yukic	(831) 426-1440			
Company Name:	**Fax No.:**	**Project No.:**	**Company:**	**Quote No.:**
Atlas Engineering				
Mailing Address:	**Email Address:**	**Project Name:**	**Billing Address: (If Different)**	
P.O. Box 1260	Atlas@Cruzio.com	SRAC		
City:	**State:**	**Zip Code:**	**Project Location:**	**City:**	**State:**	**Zip:**
Santa Cruz	CA	95061	3842 - Finley Ave. Santa Rosa			

Sampler:	Field Org. Code:
JE	

Global ID: TO60972349

Turn Around Time
- ☐ Same Day ☐ 1 Day
- ☐ 2 Day ☐ 3 Day
- ☐ 4 Day ☒ 10 Day ☐ 5 Day

Order ID: 45130

Client ID / Field Point	Lab. No.	Sample Date	Sample Time	Matrix	No. of Containers	GC/MS Methods: EPA 8260B; BTEX; MTBE; TPH Gas by 8260B; 5 Oxygenates (MTBE, TBA, ETBA, DIPE, TAME); Lead Scavengers (1,2-DCA & EDB); Ethanol; Base/Neutral/Acid Organics 8270C; PAH - 8270C SIM; PAH - 8270C; TPH Extractable: Diesel; Motor Oil; Other; TPH - Diesel, Kerosene, Stoddard solvent; TPH Extractable w/ Si-Gel Cleanup; Pesticides-8081; PCBs - 8082; TPH as Gas/BTEX; MTBE by 8015M/8020; Methanol by 8015M; GC Methods: SVOC's 8270C; General Chemistry: Anions: F, Cl, Br, SO4, NO3, NO2, PO4; pH; TSS; SC; TOC; TRPH; O & G; Metals: Circle Below Total, Dissolved; STLC; TCLP	Remarks
45130 +							
MW-2	-001	9/1/05	1245	W	4	X (BTEX); X (TPH - Diesel, Kerosene, Stoddard solvent)	
Well	-002	9/1/05	1300	W	3	X (Methanol by 8015M/8020)	X (Metals)

Composited

Relinquished by:	Received by:	Date:	Time:
		9/1/05	1545
Relinquished by:	Received by:	Date:	Time:
		9/1/05	
Relinquished by:	Received by:	Date:	Time:

Special Instructions or Comments

- ☐ EDD Report
- ☒ EDF Report
- ☐ Plating
- ☐ LUFT-5
- ☐ RCRA-8
- ☐ PPM-13
- ☐ CAM-17

Metals:
Al, As, Sb, Ba, Be, Bi, B, Cd, Ce, Ca, Cr, Co, Cs, Cu, Fe, (Pb), Mg, Mn,
Ga, Ge, Hg, In, Li, Mo, Ni, P, K, Si, Ag, Na, S, Se, Sr, Ta, Te, Tl, Sn, Ti, Zn, V, W, Zr